

DROUGHT:

<u>Potential Impact:</u>	Throughout a Large Region
<u>Cascade Effects:</u>	Some Potential
<u>Frequency:</u>	An Infrequent Event
<u>Onset:</u>	More Than One Week Warning
<u>Hazard Duration:</u>	More Than One Week
<u>Recovery Time:</u>	Less Than One Day
<u>Impact:</u>	
	<ul style="list-style-type: none">• Serious Injury or Death is Unlikely• Moderate Damage to Private Property• Little or No Structural Damage to Public Facilities

Definition: A prolonged period of limited precipitation affecting the supply and quality of water.

Profile/Vulnerability Assessment: Schoharie County has minor droughts every couple years. Most recently there were drought warnings issued by the National Weather Service in 1999, 2000, and 2001. Drought conditions severe enough to impair the ability of the County to provide water for essential uses are unlikely. However, droughts that impact private well supplies, agriculture, and wildfire risks are likely to occur, on the average of every 2 years. Recent droughts in Schoharie County that required assistance from the County mainly impacted the dairy industry and the piping of water to ponds to provide water for cows.

Schoharie County has an average annual precipitation of 39 to 40 inches in the western and southern extremes of the County, but it decreases to 34 to 36 inches in the east-central and northeastern parts. Yearly fluctuations are within 3 inches of the average. Even though New York normally possesses an adequate water supply with sufficient annual precipitation to replenish surface- and ground-water resources, the region is still susceptible to periods of drought. In Schoharie County, all private and some public water supplies are from wells and springs. Ground water is the source of water for a majority of public water supplies.

Drought periods progress through stages and drought intensity may vary considerably during the drought period. The time of occurrence and duration can cause significant variations in drought impacts. The initial impact of drought is likely to be felt by agriculture and by those relying on private wells. Agriculture faces major losses when adequate soil moisture cannot be maintained and when sufficient water is not available for livestock. If it becomes necessary to impose mandatory water use restrictions or import water, additional economic impacts will occur. Some businesses and industry may be affected by reduce revenues resulting from increasingly severe restrictions on nonessential water uses. Dry conditions increase the potential for water supply contamination. Parched lands are more susceptible to wildfires during a period of drought. Structural fires also present a problem if there is not sufficient water available for fire fighting needs or if the time required to transport the water is significantly increased. If dry conditions are so severe and widespread that the region is unable to obtain adequate potable water, a drought can cause serious threats to public health and sanitation. However, the NY State Emergency Management Office reports that the historical record lacks instances of serious injury or death due to drought conditions. Additional impacts can include wildlife mortality, loss of ornamental vegetation, and damage to fish and wildlife habitat.

The potential costs associated with a severe drought include the cost of replacing private wells with deeper wells and agricultural damages.

EPIDEMIC:

<u>Potential Impact:</u>	Throughout a Large Region
<u>Cascade Effects:</u>	Highly Unlikely
<u>Frequency:</u>	A Rare Event
<u>Onset:</u>	More Than One Week Warning
<u>Hazard Duration:</u>	More Than One Week
<u>Recovery Time:</u>	More Than Two Weeks
<u>Impact:</u>	

- Serious Injury or Death is Likely, but not in Large Numbers
- Little or No Damage to Private Property
- Little or No Structural Damage to Public Facilities

Definition: An epidemic is an occurrence or outbreak of disease to an unusual number of individuals or proportion of the population, human or animal.

Profile/Vulnerability Assessment: The U.S. Centers for Disease Control and Princeton (CDC) reports that in most years, influenza-related complications are responsible for 10,000-40,000 deaths, 50,000-300,000 hospitalizations and approximately \$1 —3 billion in direct costs for medical care in the United States. Flu pandemics have occurred in the United States in 1918, 1957, and 1968. Although death rates associated with the recent pandemics of 1957 and 1968 were confined primarily to the elderly and chronically ill, both pandemics were associated with high rates of illness and social disruption, with combined economic losses of approximately \$32 billion (in 1995 dollars).

- The Spanish Influenza pandemic in 1918 is the catastrophe against which all modern pandemics are measured. It is estimated that approximately 20 to 40 percent of the worldwide population became ill and over 20 million people died. Between September 1918 and April 1919, approximately 500,000 deaths from the flu occurred in the U.S. alone. The attack rate and mortality was highest among adults 20 to 50 years old.
- Although the Asian influenza pandemic in 1957-58 was not as devastating as the Spanish Flu, about 69,800 people in the U.S. died. The elderly had the highest rates of death. The virus that caused this pandemic was quickly identified and limited supplies of vaccine were available.
- The 1968 Hong Kong influenza pandemic was the mildest pandemic in the 20th century. The number of deaths between September 1968 and March 1969 was 33,800. The reasons cited for the lower death rate include: partial immunity due to similarities with the Asian flu virus, reduced transmission by school children due to school holidays, and improved medical care and antibiotics to treat those who became ill.

Immunizations and sanitary practices have decreased the prevalence of what most people would classically think of as epidemics. However, the human population remains susceptible to influenza outbreaks, Hepatitis B, Hepatitis A, HIV, meningitis, or vector borne diseases such as West Nile Encephalitis and Lyme Disease. In addition, rabies and other diseases may affect the animal population (both wild and domestic). Recent concerns have focused on the possible use of anthrax or another biological agent by terrorists. Flooding could also trigger an epidemic, since floodwater can carry bacteria that are harmful to both humans and animals.

Although an epidemic could impact the entire population of Schoharie County, it is generally the young, old and those with existing medical conditions who are at the greatest risk. Depending on the disease, the mechanism of transmission can result in greater risks for some segments of the population than for others.

The impact of the next pandemic could have a devastating effect on the health and well being of Schoharie County residents. The CED estimates of the possible impact in the United States are:

- Up to 200 million persons may be infected;
- Between 40 and 100 million persons may become clinically ill;
- Between 18 and 45 million persons may require outpatient care;
- Between 300,00 and 800,000 persons may be hospitalized;
- Between 88,000 and 300,000 persons may die.

According to Dr. Jeffrey Huse, DVM, Assistant Director with the NYS Department of Agriculture and Markets, since 1984, there have been no major outbreaks in the Schoharie County animal populations. In the 1950's 1960's, cattle were destroyed but it was in response to the Brucellosis Iradication Program in New York State. West Nile Virus has been detected in Schoharie County, but has not resulted in any known human cases in the area. Chronic Wasting Disease has impacted deer populations in other parts of the country, but there have been no reported cases in New York.

AIR CONTAMINATION:

Potential Impact: Throughout a Large Region

Cascade Effects: Highly Unlikely

Frequency: An Infrequent Event

Onset: Several Hours Warning

Hazard Duration: Less Than One Day

Recovery Time: Less Than One Day

Impact:

- Serious Injury or Death is Unlikely
- Little or No Damage to Private Property
- Little or No Structural Damage to Public Facilities

Definition: Pollution caused by atmospheric conditions (as opposed to a chemical spill or release), such as a temperature inversion induced smoggy condition sufficiently serious to create some danger to human health.

Profile/Vulnerability Assessment: All of Schoharie County can be impacted by air contamination, but such an event is uncommon in non-urban areas. Health problems can be aggravated due to increased ozone levels, mainly asthma. Schoharie County does not expect any major health or dollar damages due to air contamination.

MITIGATION GOALS AND OBJECTIVES

Schoharie County has analyzed natural and human-caused hazards and has devised this plan to protect life and property from such events. Schoharie County has outlined the following approach to reduce the impact of the highest priority hazards that were identified previously. Lower priority hazards may have additional specific goals and objectives, but are primarily covered under the “All Hazards” goals. The action plan following this section will explain how the goals/objectives are to be accomplished.

Multi-Hazard Mitigation

All Hazards

GOAL ONE: Continue ongoing efforts and increase public awareness about hazards

- **OBJECTIVE 1.1** – Improve education program about hazards and family disaster planning, emergency supplies, evacuation procedures, transportation safety, hazard mitigation. Education program can include video, County web site, printed material for general circulation, direct mailing, training sessions, and organized events.
- **OBJECTIVE 1.2** – Improve dissemination of emergency warnings and weather information to residents, businesses, and institutions by increasing use of NOAA Weather Radios and increasing use of National Weather Service – Albany Forecast Office web site for latest weather information. If duplication does not exist, work with SEMO on Emergency Alert System.
- **OBJECTIVE 1.3** – Make the Schoharie County All-Hazard Mitigation Plan available to the public on the County website and at town/village offices, public libraries, Emergency Management Office, and Planning and Development Agency.
- **OBJECTIVE 1.4** – Encourage local official participation in hazard related training offered at County, State, Federal levels.
- **OBJECTIVE 1.5** – Appropriate local staff will be available to assist schools with fire, weather hazard, and terrorism drills.

GOAL TWO: Provide emergency services in a timely and effective manner

- **OBJECTIVE 2.1** – Provide municipal officials with periodic training in the Incident Command System and National Incident Management System and other responsibilities during hazard events.
- **OBJECTIVE 2.2** – Periodically test all emergency communication equipment and upgrade/replace as appropriate.
- **OBJECTIVE 2.3** – Periodically verify that schools, Summit Shock Facility, nursing homes, hospitals and businesses that handle hazardous materials have current emergency response plans in effect.
- **OBJECTIVE 2.4** – Improve/maintain communication among highway departments to enable coordinated maintenance of emergency transportation routes.

- **OBJECTIVE 2.5** – Participate in the review of emergency response plans to verify that they are current and consistent with the County Comprehensive Emergency Plan.

GOAL THREE: Maintain the viability of all critical facilities and operations

- **OBJECTIVE 3.1** – Periodically review and update the list of critical facilities serving the County (Appendix D).
- **OBJECTIVE 3.2** – Ensure that critical facilities are able to provide essential services during a power outage.
- **OBJECTIVE 3.3** – Develop and implement strategies to mitigate risks to critical facilities. New critical facilities should be located in areas of low hazard potential and properly constructed.
- **OBJECTIVE 3.4** – Expand and improve the alternate County Emergency Operations Center and County computer server backup locations in Cobleskill.

GOAL FOUR: Maintain support (political and private sector) for hazard mitigation and emergency response

- **OBJECTIVE 4.1** – Invite municipal elected officials to meetings of the Schoharie County Hazard Mitigation Committee to guide implementation of this plan and the revision of the plan.
- **OBJECTIVE 4.2** – Encourage Schoharie County Flood Committee to broaden past view from one of flood response to include education, mitigation and response for all water related hazards (flood, ice jam, dam failure, drought, and water supply contamination).
- **OBJECTIVE 4.3** – Maintain and expand public/private sector coordination through organizations that are actively involved in hazard reduction activities.
- **OBJECTIVE 4.4** – Encourage public/private sector organizations (tourist facilities) to prioritize and implement hazard mitigation objectives. Facilities with outdoor exposure should be equipped with NOAA Weather Radio.

Flood (Flood, Ice Jam, Dam Failure)

GOAL ONE: Educate public about flood dynamics, flood hazards, flood insurance, flood safety, and flood mitigation measures

- **OBJECTIVE 1.1** – Improve existing flood awareness video and air on local cable channels during spring of each year. Video will be distributed to all schools in the County and all libraries. Video should be aired annually at County Fair.
- **OBJECTIVE 1.2** – Annually check location of “flood zone regulations in effect” signs and keep locations up to date in accordance with existing Special Flood Hazard Areas as indicated on the Flood Insurance Rate Map.
- **OBJECTIVE 1.3** – Disseminate and improve flood informational pamphlets (“Before You Buy or Build” and “Early Warning System”) for new buyers of property and general public.
- **OBJECTIVE 1.4** – Target property owners with structures in floodplain with education material and increase flood awareness locally (especially with early warning procedures).
- **OBJECTIVE 1.5** – Educate property owners adjacent to streams about proper stream maintenance.
- **OBJECTIVE 1.6** – Increase flood insurance coverage for vulnerable structures and encourage municipalities to apply for Community Rating System to lower flood insurance premiums.
- **OBJECTIVE 1.7** – Improve evacuation routes and maintain shelters to use in the event of a dam failure. Annually check signage for the routes and maintain as necessary.

GOAL TWO: Minimize stream bank erosion and improve water quality

- **OBJECTIVE 2.1** – Study, develop, and implement projects for stabilizing stream channels in locations where erosion threatens development or agricultural resources. Priority streams identified with ongoing problems include: Town of Broome – Catskill Creek, Town of Esperance – Fly Creek, Town of Esperance – Schoharie Creek, Town of Fulton – Pleasant Valley Creek, Town of Schoharie – Schoharie Creek, Town of Middleburgh – Schoharie Creek, Town of Middleburgh – Little Schoharie Creek, Village of Middleburgh – Little Schoharie Creek, Town of Conesville – Manor Kill, Village of Cobleskill – Mill Creek, Town of Wright – Fox Creek, Town of Wright – King Creek
- **OBJECTIVE 2.2** – Expand on 1/3 Stream Maintenance Pilot Project started in 2004 and encourage County and municipal funding for the program. Priority projects include erosion problems that threaten multiple property owners, development, and /or prime agricultural land.
- **OBJECTIVE 2.3** – Explore creating flood-taxing districts for properties bordering waterways with repetitive flooding problems. Pilot area may be the Village of Cobleskill – Mill Creek.

GOAL THREE: Decrease flooding/ice jam impact on roads with repetitive events

- **OBJECTIVE 3.1** – Encourage NYSDOT and County Department of Public Works to commence relocation of and improvements to roads that are often closed due to ice jams and flooding. Priority area is the Town of Richmondville – Warnerville Cut-off Road.

GOAL FOUR: Streams, drainage ways, and drainage structures are maintained to minimize the potential for obstruction of flow

- **OBJECTIVE 4.1** – Expand on New York City Watershed monitoring pilot program funded in 2004 on a Countywide scale for routine inspection and maintenance of streams, roadside ditches, and drainage ways in order to reduce the potential for flooding caused by debris obstructions/sedimentation.
- **OBJECTIVE 4.2** – Develop and implement a strategy for maintenance of privately owned storm water drainage systems and secondary stream channels.

GOAL FIVE: Mitigate flood risks for existing and new development

- **OBJECTIVE 5.1** – Evaluate opportunities (and implement as appropriate) to alleviate flooding problems by retaining or retarding water upstream through wetland creation/retention structures during high flow. Possible projects include: Village/Town of Cobleskill – Mill Creek, Village/Town of Middleburgh – Stoney Creek
- **OBJECTIVE 5.2** – Develop and implement a strategy for replacing undersized bridges and culverts on public roadways and on private property. Possible projects include: Town of Jefferson – Mill Creek/Porter Road.
- **OBJECTIVE 5.3** – Inventory all floodplain structures and educate/assist floodplain property owners with implementing measures that will protect existing development from flood risks (elevation of utilities, sewer backup protection, flood-proofing measures, extension of municipal sewer and water, structure elevation, property acquisition). Priority areas identified for elevation/acquisition projects include: Town of Esperance – Priddle Camp, Town of Esperance – U.S. Route 20 along Schoharie Creek, Village of Esperance – Steuben Street, Town of Fulton – Pleasant Valley Road, Town of Schoharie – Karkendorf Road along Schoharie Creek, Village of Schoharie – Sunset Drive and Bridge Street, Town of Sharon – Engleville Road, Town of Middleburgh – Mill Lane, Village of Middleburgh – Baker Avenue, Dexter Avenue, Middlefort Road and River Street, Town of Blenheim – North Blenheim.
- **OBJECTIVE 5.4** - Work with NYDOT to elevate roads that routinely flood.
- **OBJECTIVE 5.5** – Incorporate and cross reference local flood damage prevention laws in all new/revisions to local comprehensive plans and zoning laws.

GOAL SIX: Dams are routinely checked and maintained for safety

- **OBJECTIVE 6.1** – Improve communication with private dam owners and encourage better dam inspection by NYDEC.
- **OBJECTIVE 6.2** – If nonexistent, develop Emergency Action Plans for all municipal water reservoir dams.
- **OBJECTIVE 6.3** – Participate in review and exercises in relation to Emergency Action Plans in Event of Dam Failure with New York Power Authority and City of New York.
- **OBJECTIVE 6.4** – Encourage NYCDEP to implement flood control measures on repairs to Gilboa Dam.
- **OBJECTIVE 6.5** – Help Dam Concerned Citizens achieve their goal of use of highest design, construction, operation, maintenance, and inspection standards on dams. Independent oversight of the design, construction, operation and maintenance of dams by qualified dam engineers. Dam owners' indemnification of downstream residents and local governments for financial costs and losses attributable to dams. Increased media awareness and the quality of media reporting on dam and flood issues.
- **OBJECTIVE 6.6** – Develop mapping and inspection procedure for monitoring beaver dams in the County.

Severe Weather

(Severe Storm, Severe Winter Storm, Ice Storm, Tornado, Extreme Temperatures)

GOAL ONE: Minimize damage from trees to utilities, structures, and other utilities

- **OBJECTIVE 1.1** – Maintain trees along municipal right-of-ways
- **OBJECTIVE 1.2** – Support/encourage utility companies to maintain trees near telephone and power lines.
- **OBJECTIVE 1.3** – Locate/create educational information about maintenance of trees adjacent to structures.
- **OBJECTIVE 1.4** – Explore providing brush pickup services and/or designated drop off locations (chip/mulch/compost) to encourage tree maintenance and to discourage improper disposal of yard debris in drainage ways.
- **OBJECTIVE 1.5** – Land use regulations should recommend, encourage, or require underground utilities in new developments if feasible. Utility companies should be encouraged to use underground construction methods if feasible

GOAL TWO: Buildings are able to withstand high wind and heavy snow

- **OBJECTIVE 2.1** – Code Enforcement Officers receive annual training and political support in order to effectively enforce the structural standards in the New York State Building Code.
- **OBJECTIVE 2.2** – Code Enforcement Officers should be encouraged to inspect older buildings that may not conform to the structural standards in the New York State Building Code to identify vulnerabilities for owners.

GOAL THREE: Transportation routes are reopened as quickly as possible following a severe weather event

- **OBJECTIVE 3.1** – Highway Departments improve monitoring of weather conditions and forecasts (on-line information) to enable timely response to snow, ice, and high water conditions.
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- **OBJECTIVE 3.2** – Highway Departments periodically review and revise plowing schedules and hazardous weather response procedures to minimize time required to restore safe roadways.
- **OBJECTIVE 3.3** – Highway Departments and emergency service providers' work together to provide emergency service transportation during inclement weather.

Terrorism

GOAL ONE: Facilities identified as potential terrorist targets address such threats in their operating policies

- **OBJECTIVE 1.1** – Develop/improve protection plans and public response plans at identified terrorist targets.
- **OBJECTIVE 1.2** – Vulnerability of public water supplies shall be assessed and public water suppliers shall prepare and periodically review emergency action plans.
- **OBJECTIVE 1.3** – Work with Iroquois Gas Transmission System, Tennessee Gas Pipeline, and Texas Eastern Products to improve public education about how to report suspicious activity near natural gas/propane lines.
- **OBJECTIVE 1.4** – Work with owners of public mass gathering locations to explore means to decrease terrorism vulnerability.

GOAL TWO: Potential terrorist events at schools or other public facilities are responded to in a timely, safe, effective manner

- **OBJECTIVE 2.1** – First responders cooperate with schools in the planning and implementation of the Safe Schools Against Violence in Education (S.A.V.E) program.
- **OBJECTIVE 2.2** – Municipal officials annually meet with the safety officer of each school to review the S.A.V.E. plan and verify consistency with municipal emergency operations.
- **OBJECTIVE 2.3** – School officials receive training in the Incident Command System and the operations procedures specified in the S.A.V.E. plan.

GOAL THREE: Municipal facilities are better protected against terrorist events

- **OBJECTIVE 3.1** – Analyze municipal facilities for vulnerability to terrorism.
- **OBJECTIVE 3.2** – Explore the use of barrier construction methods/security checks in vulnerable locations. Work with County Safety Committee to identify County vulnerabilities and methods to reduce vulnerabilities.
- **OBJECTIVE 3.3** – Improve identification methods for County employees.

Transportation Accident

GOAL ONE: Promote transportation safety and maintain and upgrade roads in a manner that promotes transportation safety

- **OBJECTIVE 1.1** – Raise public awareness about traffic safety issues by participating in outreach efforts and disseminating safety information through County Traffic Safety Board.
- **OBJECTIVE 1.2** – Highway departments periodically survey approved traffic control devices (signs, markers, signals, etc...) and upgrade as needed.
- **OBJECTIVE 1.3** – In conjunction with the NYSDOT, develop Access Management Plans for major travel corridors in the County. Priority: NYS Route 7/10.
- **OBJECTIVE 1.4** – Provide municipal personnel with opportunities to participate in current defensive driving programs in County.
- **OBJECTIVE 1.5** – Work with NYDOT to fix locations with accidents above the statewide average.
- **OBJECTIVE 1.6** – Target law enforcement efforts at high accident locations and times.
- **OBJECTIVE 1.7** – Complete MacArthur Avenue Extension in Village of Cobleskill.
- **OBJECTIVE 1.8** – Install alternate power sources for 13 County intersection traffic lights (Villages given first priority).

GOAL TWO: New development projects are designed and located to promote transportation safety

- **OBJECTIVE 2.1** – Municipal comprehensive plans and land use regulations should promote development patterns in which major transportation routes are located away from major population areas, schools, and gathering areas.
- **OBJECTIVE 2.2** – Comprehensive plans and land use regulations should encourage interconnection of commercial properties in order to reduce use of major arterials.
- **OBJECTIVE 2.3** – When road upgrades or other construction projects are developed, plan to eliminate at-grade railroad crossings on State Routes and County Roads.

GOAL THREE: Emergency response personnel respond quickly and effectively to a major transportation accident

- **OBJECTIVE 3.1** – Emergency personnel periodically evaluate the need for alternate access routes to areas that may become isolated if a bridge, railroad crossing, or other transportation route becomes blocked. If problem areas are identified, find alternative solutions for gaining access.

OBJECTIVE 3.2 – Annually update County and hospital plans that relate to transportation events.

Hazardous Materials/Fire

(Hazardous Material release in Transit, Hazardous Material Release at a Fixed Site, Oil Spill, Explosion, Fire, Radiological Release In Transit)

GOAL ONE: Educate the public with information about how to respond to a hazardous material incident

- **OBJECTIVE 1.1** – In areas near major transportation routes/facilities that use or store hazardous materials, educate the residents on evacuation procedures and shelter locations. Improve Early Warning System for use during a hazardous material incident.

GOAL TWO: Emergency response personnel respond quickly and safely to a hazardous material incident

- **OBJECTIVE 2.1** – First responders periodically obtain hazardous material training.
- **OBJECTIVE 2.2** – First responders annually inventory their equipment and supplies for hazardous material response and fix/replace/obtain equipment as necessary.
- **OBJECTIVE 2.3** – Fire departments maintain up-to-date information about hazardous materials stored and used within their response area and are familiar with the layout of the facilities.
- **OBJECTIVE 2.4** – Work with Schoharie County Farm Bureau to encourage safe and consistent storage practices for hazardous materials on agricultural operations. Improve communication with agricultural operations and fire departments about storage of hazardous materials. Obtain signage for agricultural hazardous material locations.
- **OBJECTIVE 2.5** – Work with Bassett Hospital to ensure that medications and equipment needed to treat exposure to hazardous materials are accessible.

GOAL THREE: New development is designed and located in such a manner as to minimize risks associated with the transport and use of hazardous materials

- **OBJECTIVE 3.1** – Highway construction projects need to consider drainage, site access, and other conditions that might impact the dissemination of hazardous materials and the ability of emergency personnel to respond.
- **OBJECTIVE 3.2** – Work with owners of facilities that store and/or utilize hazardous materials to safely store and handle such materials.

- **OBJECTIVE 3.3** – Comprehensive plans and land use regulations should promote development patterns in which major transportation routes and industrial facilities are located away from schools, day cares, churches, waterways, and municipal water sources.

Ground Movement (Earthquake, Landslide, Mine Collapse, Structural Collapse)

GOAL ONE: Protect structures and people from ground movement events

- **OBJECTIVE 1.1** – Code Enforcement Officers shall be offered annual training and political support in order to effectively enforce the structural standards in the New York State Building Code.
- **OBJECTIVE 1.2** – Ensure that road/development projects involving slope steepening are designed with proper slopes to reduce landslide and slump potential.
- **OBJECTIVE 1.3** – Work with owners of Howes Cave Quarry to ensure that new development does not jeopardize the integrity of the former mine and area caves. Support proposed mining museum on site for protection and safe development of the area.
- **OBJECTIVE 1.4** – NYSDOT should be encouraged to reduce rockslides that routinely impact state routes.
- **OBJECTIVE 1.5** – Secure funding and design projects to eliminate existing landslides in the County.

Non-Hazardous Material Fire, Explosion, Wildfire

GOAL ONE: Lessen chances and impacts of fire related damage, injuries, and deaths

- **OBJECTIVE 1.1** – Continue ongoing education of public on use of carbon monoxide detectors, fire detectors, fire extinguishers and fire prevention/safety.
- **OBJECTIVE 1.2** – Identify, create and maintain firebreaks near structures close to forested areas with steep slopes. Priority areas: Hamlet of Eminence in Towns of Blenheim, Jefferson, and Summit. Large forested areas in Towns of Blenheim, Broome, Conesville, Fulton, Gilboa, and Jefferson.
- **OBJECTIVE 1.3** - Install protection for existing dry hydrants.
- **OBJECTIVE 1.4** – Work with fire departments to inventory accessible water supplies for fire protection and develop a dry hydrant program to make water more accessible in rural areas.
- **OBJECTIVE 1.5** – Work with fire departments to develop written, shared fire-fighting tactics for areas where large or multiple structure fires are possible.

Water Supply Contamination

GOAL ONE: Municipal water supply is better protected from contamination

- **OBJECTIVE 1.1** – Educate property owners about applicable restrictions in municipal water supply watersheds
- **OBJECTIVE 1.2** – Explore use of more stringent land use regulations to protect watershed of municipal water supplies.
- **OBJECTIVE 1.3** - Ensure that public water supplies vulnerability assessments and emergency response plans are kept up to date.

Drought

GOAL ONE: Lessen drought impacts on private wells and agriculture

- **OBJECTIVE 1.1** – Identify back-up wells in the County to be used for alternative water supply and to monitor water levels for early detection and arrange agreement for use of such wells.
- **OBJECTIVE 1.2** – Work with Schoharie County Farm Bureau to encourage coordination with farmers during drought to assist each other with water supply issues.
- **OBJECTIVE 1.3** - Continue work with SEMO to provide water pumps and water line for emergency use if County owned pumps and water line is being utilized at a time of need.

Epidemic

GOAL ONE: Protect human and non-human populations from infectious diseases

- **OBJECTIVE 1.1** – Obtain equipment, use of facilities, personnel training, or other necessary items as needed by the Schoharie County Department of Health to help respond to human disease outbreaks (including bioterrorism).
- **OBJECTIVE 1.2** – Work with Schoharie County Farm Bureau to educate agriculture and non-agriculture community on methods to decrease spread of infectious diseases.
- **OBJECTIVE 1.3** – Work with Schoharie County Animal Disease Response Team to obtain necessary materials to protect/respond to a disease outbreak and to identify and arrange for animal carcass burial locations

Caving Accident

GOAL ONE: Respond to caving accidents in a timely, safe and effective manner

- **OBJECTIVE 1.1** – Provide emergency response officials with periodic training in cave rescue techniques (especially responders in the northern section of the County).

GOAL TWO: Reduce the possibility of caving accidents

- **OBJECTIVE 1.1** – Work with the National Speleological Society to educate the public about the safe means to access and explore caves.

Utility Failure

GOAL ONE: Reduce possibility/impact of utility failure

- **OBJECTIVE 1.1** – Explore means to help offset costs to obtain and maintain generators for schools, commercial businesses, and agriculture industry.
- **OBJECTIVE 1.2** – Explore means to help offset costs to upgrade existing sewer, water and communications infrastructure in the County.

ACTION PLAN

To begin meeting the goals and objectives identified in the previous section, Schoharie County, towns, and villages agree to implement the following actions. Although the County is prepared to assist all municipalities with any hazard mitigation efforts, the proposed actions that will be lead solely through the County are listed separately from actions where town/village lead may be taken with County assistance.

This action plan only includes those items that can be accomplished over the next twenty years by the County, towns, and villages. Fully achieving the goals and objectives set forth in this plan will necessitate additional study and activities in future years, as well as the active participation of additional partners. The Hazard Mitigation Committee recognizes that, although several communities have identified potential mitigation projects, a lack of engineering expertise hinders attaching a proposed cost to many of the actions and that hiring engineer firms or staff in the next four years would help better define several projects in the County. Initially, those actions that are the most cost effective and/or appear to be the most urgent due to potential impacts to life and property have determined priority. High priority actions are also those that educate the public about hazards and those actions needed to further refine, improve, and implement the hazard mitigation plan. On an annual basis, the Hazard Mitigation Committee will be responsible for prioritizing new projects using a method such as STAPLEE or another useful prioritization method. Each planned construction action will undergo a benefit-cost analysis (FEMA Benefit/Cost software) before undertaking to ensure that the most cost-effective projects are considered first. HMGP will also undergo benefit-cost analysis by NYSEMO.

MEASURES TO BE IMPLEMENTED BY SCHOHARIE COUNTY

Many hazard mitigation activities can be implemented on the County level and have positive impacts for every municipality. Municipal support for the actions is key for successful implementation, but County resources and employees can be utilized for the work. The County desires to continue or initiate each of the following activities using existing or anticipated resources. Schoharie County is a rural, sparsely populated region and unforeseen fiscal constraints limit the staff and financial resources that can be devoted to these activities and may delay or preclude full implementation of some of these proposed measures. Grant funding (mainly through NYDEC, NYSEMO, NRCS, and NYSDOT) will be pursued by the County to help supplement any of the strategies/projects that arise through the mentioned actions. Funding sources identified in the New York State Multi-Hazard Mitigation Plan will also be pursued.

For each action the following is identified as best as possible - priority and/or projected time per year, potential funding source, lead agency, and support agency (if needed). Actions are given either a high priority or a moderate priority. High priority actions will take place annually or in the next five years. Moderate priority actions will take place over the next decade to twenty years. Potential funding sources are labeled as local, State, or Federal as specific sources can change.

Multi-Hazard Mitigation

Hold an annual special hazard information meeting: This event will be the main yearly event to achieving success in mitigating hazards in Schoharie County. This event is envisioned to bring this plan “off the shelf” each March starting in 2007 and to get people thinking about hazard mitigation. The County shall host this hazard information meeting to discuss strategies to ensure implementation of the objectives outlined in this plan. This meeting will be in addition to regular meetings of the Hazard Mitigation Committee. All municipal representatives, key County Departments, applicable State

Agencies, and the public will be invited to attend. Revisions and improvements to this plan can be proposed for changes to take place at the four-year review. Potential funding sources for the year can be more defined and individuals assigned the task of funding procurement for the year. Committees can be established to concentrate on achieving certain objectives in the plan.

Priority/Time: High/Once annually

Funding: Local

Lead: Schoharie County (Planning Agency and Emergency Management Office)

Support Agency: NYSEMO

Distribute hazard information: At the annual hazard information meeting and throughout the year, the Hazard Mitigation Committee will review brochures that are available in the County offices and evaluate the need for additional information/revisions about hazards, emergency preparedness, warning system, hazard mitigation, storm water management, and tree maintenance. Appropriate brochures will be procured and maintained on the display racks. The maps of hazards that are included in this plan will be displayed in the corresponding municipal offices. Copies of the Schoharie County All-Hazards Mitigation Plan will be available at the Planning and Development Agency, Emergency Management Office, local libraries, town halls and village halls. A public information committee was formed in 2005 in response to the Gilboa (Schoharie Reservoir) Dam emergency situation, and this group will continue to work.

Priority/Time: High/Once annually and as needed

Funding: Local/State/Federal

Lead: Schoharie County (Planning Agency and Emergency Management Office), Public Information Task Force

Support Agency: NYSEMO, County Department of Public Works, Village/Town Clerks

Articles in local newspapers: The County will continue to print articles about flooding and other hazards whenever possible and appropriate in the Times Journal, Mountain Eagle, and Schenectady Daily Gazette. Newspaper articles will inform residents about what is being done to protect the County from hazards; the measures people can take to prepare for disasters and how people can mitigate potential hazard impacts. The Planning and Development Agency and Emergency Management Office will be the key departments to draft and issue such articles.

Priority/Time: High/at least twice annually

Funding: Local

Lead: Schoharie County (Planning Agency and Emergency Management Office)

Supporting: All Agencies that deal with hazards can provide source material

Include hazard information on the County website: At the annual hazard information meeting, the Hazard Mitigation Committee will review the hazard information available on the County website, additional information about hazards and emergency response will be incorporated directly or by linking to other sites. Topics will include hazard information, family disaster planning, emergency supplies, how to obtain current warnings and weather forecasts, how to shelter-in-place, evacuation procedures, "good neighbor" policies, transportation safety, mitigation measures, etc.

Priority/Time: High/Once annually/Updates as needed

Funding: Local

Lead: Schoharie County (Planning Agency and Emergency Management Office)

Support Agency: Schoharie County Central Data Processing

Support education efforts: The County will continue to participate in and support County, regional, and state education efforts that address: natural hazards, flood mitigation, storm water management, emergency preparedness, wetland protection, and related topics. At the annual hazard information meeting, a discussion of needed training courses for the year will be discussed and planned. Municipal and County officials will be encouraged and/or required to participate in Incident Command System training and National Incident Management System training. Elected and appointed officials as well as paid and volunteer staff that deal with emergency situations will be informed of training opportunities.

The Schoharie County Flood Committee meets at least quarterly and will be encouraged to continue education of members through invited speakers and printed material. Through continued discussions by members of the public, Planning and Development advisors, Emergency Management Office advisors, and Natural Resource Conservation Service advisors, a broadened view of the role of the committee will be continued.

Priority/Time: High/Once annually/As needed

Funding: Local

Lead: Schoharie County (Planning Agency and Emergency Management Office)

Review and update emergency plans: The County Comprehensive Emergency Management Plan documents procedures that enable the County and municipalities to provide leadership and coordination during an emergency. This plan will be periodically reviewed (minimum of every 4 years) and updated to ensure that the information is current and accurate. At a minimum, contact information (for municipal officials, emergency personnel, utilities, etc.) will be updated annually. A complete review of the plan will be conducted periodically or after any event that triggers activation of the plan. Municipal representatives will be involved in this planning process in order to insure consistency with any local Emergency Plans. In addition, each fire department and police department that serves the County will be asked to participate in the plan review process in order to insure their familiarity with the plan.

Issues that will be evaluated as part of the plan review process, include:

- Verify that the equipment identified in the plan is available and in good condition.
- Test emergency communication equipment; upgrade as appropriate.
- Review and update the list of critical facilities serving the County (Appendix D).
- Evaluate each critical facility to identify potential vulnerabilities, such as: structural problems, outdated emergency operation plan, lack of an identified safety zone within the structure (areas that offer the greatest protection from roof failure, broken glass, flying debris, etc.), inability to function during a power outage, accessibility, etc. Develop strategies/projects that will mitigate or compensate for any identified risks to critical facilities. Continue to pursue generator purchase program for all County schools started in 2006.
- Evaluate alternate County Emergency Operations Center and computer server backup location that was established in 2006 in a low hazard risk area. Input by the County Central Data Processing Office will be required. Suggested improvements will be presented to the Schoharie County Board of Supervisors.
- Identify local animal hospitals, kennels, and other places where pets and farm animals can be housed during an evacuation and enter into agreements with these facilities. Include a list of these resources in the plan. Identify possible locations and conditions for mass burial of animals. The County Health Department and Farm Bureau will provide input.
- Assemble a list of key equipment that may be available from neighboring municipalities to assist with operations during an emergency. Include a list of these resources in the plan.
- Review and document procedures for highway departments to assist with the transportation needs of emergency service providers when the roads are not generally passable.

- Meet with the safety officer of each school and daycare center (Department of Social Services has updated list of daycares) to review the school's Safe Schools Against Violence in Education (S.A.V.E.) plan or emergency plan and verify consistency with the County Comprehensive Emergency Plan. Schools in the County include: Cobleskill-Richmondville High School, Golding Middle School, Radez Elementary, Ryder Elementary, Jefferson Central, Gilboa-Conesville Central, Middleburgh Central School, Schoharie Central School, Sharon Springs Central School. Daycares in the County include: Cobleskill Campus Child Care Center, Cobleskill-Richmondville Children's Center, Morning Star Learning Center, Schoharie Career/Teen Parenting Program, Clover Patch Day Care, Schoharie County Child Development Council (Blenheim, Sharon Springs, Cobleskill, Schoharie), Whispering Pines, Kathy Brayton, Marie Cater, Julie Cousin, Dana Devlin's Family Day Care, Grandma's House, Andrea Hall, Beth Hanna, Lois Hughes, Heather Kelly, Pamela Lawyer, Susan Maxwell, Meghan Mazzariello, Joan Oliver, Theresa Pricolo, Dawn Schell, Pamela Standhart, Talena Treadwell, Anna Mae Young, Linda Holmes, Lenora Piragnoli, Sunny Days, Tiny Steps, Helen Van Arsdal, Laurel Williams.
- Contact key industries and businesses (nursing homes, health care facilities, businesses/large farms that handle hazardous materials, etc.) to verify that they have emergency response plans, that those plans are consistent with the local emergency response plans, and that up-to-date 209-U reports are on file with the fire department.
- Update the existing list of potential terrorist targets; develop target protection plans and public response plans. Meet with owners/employees of identified targets, if deemed necessary, to assist in the process.
- Meet with NYS Department of Transportation staff to review risk and response issues related to potential transportation accidents and hazardous material in transit incidents.
- Meet with NYSDEC Dam Safety Bureau and private dam owners to discuss Dam Safety Plans for dams in the County.
- Evaluate the need for alternate access routes to areas that may become isolated if a bridge, Canadian Pacific Railroad crossing, or other transportation route becomes blocked.

Priority/Time: High

Funding: Local

Lead: Schoharie County Emergency Management Office

Support Agency: All County Agencies that deal with hazards

Provide NOAA weather radios to residents and businesses: Continue NOAA weather radios purchase program initiated in 2005 and provide radios to residents and businesses in locations that are prone to flooding or other hazards (or opportunity to purchase radios at a discounted price). Establish system for keeping radios maintained and inventoried. Assist municipalities (highway superintendents) with internet access for weather reports.

Priority/Time: High/Started in 2005 and is ongoing

Funding: Local/NYC

Lead: Schoharie County (Sheriff, Fire Coordinator, Emergency Management Office)

Support: Schoharie County Central Data Processing

Improve Early Warning Systems: Schoharie County has several early warning systems in place include automated calling systems and is undertaking (2006) installation of an advanced audible warning system in the Schoharie Valley. These systems will continue to be improved and tested and discussed at the annual hazard information meeting.

Priority/Time: High/Started in 2005 and is ongoing

Funding: Local/NYC

Lead: Schoharie County (Sheriff, Fire Coordinator, Emergency Management Office)

Support: Schoharie County Central Data Processing

Improve GIS: Schoharie County does not have a true Geographic Information System (GIS) and this can be a hindrance to emergency planning and hazard mitigation planning. Schoharie County is currently digitizing tax maps countywide and the GIS needs to be continually updated with data, equipment, and staff training. The status of GIS and activities to be undertaken shall be discussed at the annual hazard information meeting. Staff needs training in HAZUS MH software.

Priority/Time: High

Funding: Local State

Lead: Schoharie County (Real Property Tax, Central Data Processing, Planning and Development)

Support: all County Agencies

Flood

Direct mailing to owners of flood prone areas: The County will continue to distribute flood information to owners of property in special flood hazard areas and other flood prone areas and local realtors. Each year, the Planning and Development Agency and Emergency Management Office will review the current informational pamphlets and the distribution list. Revisions will be made and new printed material created as appropriate. GIS will be utilized to help update the distribution list.

Priority/Time: High

Funding: Local

Lead: Schoharie County (Planning Agency and Emergency Management Office)

Support Agency: Schoharie County (Real Property Tax Office, Central Data Processing)

Update and improve flood video: At the annual hazard information meeting, the Hazard Mitigation Committee will review the current flood video that airs on local cable (each spring) and at the County Fair to evaluate the need for additional information/revisions about riverine dynamics, flood hazards, emergency preparedness, flood early warning system, hazard mitigation, storm water management, wetlands, and the National Flood Insurance Program. Additional funding may be needed to edit the video. Any new update videos will be redistributed to local libraries and schools.

Priority/Time: High/Once annually

Funding: Local/State

Lead: Schoharie County (Planning Agency and Emergency Management Office)

Support: SCHOPEG, NYDEC, NYSEMO

Maintain flood zone and flood evacuation signs: Every two years or when substantial changes are made to Flood Insurance Rate Maps or evacuation routes, the Planning and Development Agency and Emergency Management Office will confer with municipal highway superintendents and NYDOT to review the location of the 61 flood zone notification signs placed in the County. If it is determined that signs need to be replaced or moved, the assistance of NYDOT and the County Department of Public Works will be utilized.

Priority/Time: High/Once annually

Funding: Local

Lead: Schoharie County (Planning Agency and Emergency Management Office)

Support Agency: Municipal Highway Superintendents, NYDOT, County Department of Public Works

Replace/install stream gauges: The Emergency Management Office will continue to work with the Mohawk-Schoharie Hydro Committee to address the stream gauge information for waterways in the County.

Priority/Time: High

Funding: Local

Lead: Schoharie County Emergency Management Office

Support Agency: NYSEMO, USGS

Inventory storm water infrastructure: The County has commenced a program in the New York City Watershed (Conesville, Gilboa, and Jefferson) for inventorying, establishing routine inspection and maintenance of road ditches, culverts, and other drainage infrastructure. Grant funds will be pursued to expand the program countywide. Improved documentation procedures and communication with highway superintendents will be developed to improve the effectiveness of these inspection and maintenance activities and to qualify communities for increased Community Rating System credit. The Hazard Mitigation Committee will begin outreach to private landowners to educate them about stream channel and drainage ditch maintenance. It is anticipated that identification of mitigation projects on the municipal level will be aided by identifying undersized bridges and culverts through the program.

Priority/Time: High

Funding: Local/State

Lead: Schoharie County Planning Agency

Support Agency: NYDOS, Municipal Highway Superintendents

Improve private dam safety/inspections: The Hazard Mitigation Committee will identify and commence communication with private dam owners about proper maintenance and inspection of dams. The help of the NYDEC Bureau of Dam Safety will be key to the education process. Any dams identified as needing repair will be reported to the corresponding municipality as a possible grant application to NYDEC and/or NYSEMO.

Priority/Time: High/Once annually

Funding: Local/State/Federal

Lead: Schoharie County (Planning Agency and Emergency Management Office)

Support Agency: NYSEMO, NYDEC

Work with dam owners to improve dam safety: The Schoharie County Board of Supervisors and local citizen groups must continue to lobby for increased dam safety. It is a priority (especially for Gilboa (Schoharie Reservoir) Dam to use highest design, construction, operation, maintenance, and inspection standards on dams. Also pursue independent oversight of the design, construction, operation and maintenance of dams by qualified dam engineers, dam owners' indemnification of downstream residents and local governments for financial costs and losses attributable to dams, and increased media awareness and the quality of media reporting on dam and flood issues. Dam Concerned Citizens should be supported in this cause.

Priority/Time: High

Funding: Local

Lead: Schoharie County Board of Supervisors

Support Agency: Dam Concerned Citizens

Commence beaver dam inventory/monitoring: Using equipment procured through SARA funds, the Planning and Development Agency will initiate countywide beaver dam identification and monitoring

program. With the assistance of local municipalities, known beaver dams will be identified, photographed, and mapped providing a description of each dam and the condition of the dam. A timeline for inspection will be established using local people as the inspectors. The assistance of the NWS will be sought before initiating the project and data collected will be provided to the NWS – Albany.

Priority/Time: Moderate

Funding: Local/State

Lead: Schoharie County (Planning Agency and Emergency Management Office)

Support Agency: NWS, Municipalities

Assist property owners with flood hazard mitigation measures: The Planning and Development Agency will continue to provide technical assistance for elevation of utilities and other measures for flood proofing existing structures. If property owners are interested in implementing flood protection measures that are beyond their financial means, the County and the municipality will evaluate the desirability of applying for financial assistance for flood proofing, elevation or property acquisition. Municipal approval of projects is required and some are listed in the municipal section of this plan.

Priority/Time: High

Funding: Local/State/Federal

Lead: Schoharie County (Planning Agency and Emergency Management Office)

Support Agency: NYSEMO, Municipalities

Upgrade existing drainage structures: When roads, ditches, and culverts are damaged due to drainage and flooding problems, the County will make every effort to mitigate the problem when repairs are made. The municipalities will also continue the ongoing efforts to upgrade existing drainage structures as the need and funding permit.

Priority/Time: High

Funding: Local/State

Lead: County Department of Public Works, Municipal Highway Superintendents

Support Agency: Schoharie County Planning

Make sure local plans/laws consider proper flood plain development: When comprehensive plans or new local land use laws are created or updated, review for recognition of flood damage prevention laws and other means to protect new and existing development from floods.

Priority/Time: High/As needed

Funding: Local

Lead: County Planning Commission

Severe Weather

Explore providing brush pickup or disposal locations with municipalities: The availability of a program providing brush pickup and/or designated drop off locations encourages residents to conduct periodic maintenance, which can reduce damages from an ice storm or wind storm. At the annual hazard mitigation meeting, a discussion of this service can be initiated and proposed projects developed.

Priority/Time: High/Once annually

Funding: Local

Lead: County Department of Public Works

Support Agency: County Planning Agency, Municipalities

Schoharie County All-Hazards Mitigation Plan – May 2006

Make sure local plans/laws/projects consider severe weather mitigation: When comprehensive plans/new local land use laws or newly proposed projects are reviewed, educate about underground construction of utilities to reduce severe storm impacts.

Priority/Time: High/As needed

Funding: Local

Lead: County Planning Commission

Terrorism

Starting in 2007, the Hazard Mitigation Committee shall work with the owners of gas pipelines in the County to determine the best means to improve public education about pipeline in general and how to report suspicious activity near the lines. The owners of mass gathering locations will also begin to be contacted to determine the extent of means to decrease vulnerability to terrorism at specific sites.

Priority/Time: High

Funding: Local

Lead: Schoharie County (Planning Agency and Emergency Management Office)

Assess the vulnerability of County facilities to a terrorist attack: The Hazard Mitigation Committee and the County Safety Committee should hold a special meeting every 2 years commencing in 2007 dedicated to discussing vulnerability of County owned facilities and security/identification at County facilities. Funding could be pursued for recommended construction projects at County facilities. (i.e. security check stations, barrier construction in vulnerable locations)

Priority/Time: High/Once every 2 years

Funding: Local

Lead: Schoharie County Sheriff, Safety Officer, Schoharie County Safety Committee

Support Agency: Schoharie County Fire Coordinator, NYS Police

NOTE: Other confidential actions to be undertaken by County Sheriff and NYS Police.

Transportation Accident

County Safety Board: The County Traffic Safety Board will continue to meet and periodically disseminate traffic safety information as appropriate.

Priority/Time: High/Once annually

Funding: Local

Lead: Schoharie County Sheriff, Traffic Safety Board

Support Agency: NYDOT, County Department of Public Works

Access Management Plans: The Planning and Development Agency will meet with NYSDOT to discuss Access Management Plans for major State Routes in the County. NYS Route 7 in Cobleskill and Richmondville would be a priority. Grant funding to develop such plans should be pursued.

Priority/Time: High

Funding: Local/State/Federal

Lead: Schoharie County Planning Agency

Support Agency: NYDOT

Defensive Driving: Defensive driving programs will continue to be offered to County and municipal staff/officials.

Priority/Time: High

Funding: Local

Lead: Schoharie County Safety Committee

High Accident Area Identification: The County Sheriff and NYS Police will annually review County accident incidents and times and target enforcement efforts at necessary locations to help reduce problems.

Priority/Time: High/Once annually

Funding: Local

Lead: Schoharie County Sheriff, NYS Police

NYSDOT Plans for rail crossings: The County will encourage NYSDOT to eliminate at-grade railroad crossings when reviewing new construction projects involving such crossings. Such actions will be incorporated into corridor plans as appropriate.

Priority/Time: High

Funding: Local

Lead: Schoharie County Planning Agency

Support Agency: NYDOT, County Department of Public Works

Make sure local plans/laws/projects consider pedestrian and traffic safety: When comprehensive plans/new local land use laws or newly proposed projects are reviewed, educate about pedestrian and traffic safety design.

Priority/Time: High/As needed

Funding: Local

Lead: County Planning Commission

Hazardous Materials/Fire

Early Warning System: The County should expand the flood early warning system to include uses for other hazards (especially hazardous material events). The Hazard Mitigation Committee will invite the County Central Data Processing Office to assist with this project.

Priority/Time: High/Started in 2006

Funding: Local/NYC

Lead: Schoharie County Sheriff

Support Agency: County Planning Agency, County Emergency Management, NYCDEP, County Central Data Processing

Agricultural Operations: At the annual hazard mitigation meeting, invite Schoharie County Farm Bureau members to discuss ways to improve hazardous material storage/handling at large agricultural operations. Devise a method for farms to notify local fire departments of the time/type/quantity of hazardous material being stored.

Priority/Time: Moderate/Once Annually

Funding: Local

Lead: Schoharie County (Planning Agency and Emergency Management Office)

Support Agency: Schoharie County Farm Bureau, Schoharie County Agriculture and Farmland Protection Board

Local official training: The County should provide hazardous material awareness training for appropriate municipal officials and staff. The Schoharie County Fire Coordinator will offer this training periodically and invite participation from the municipalities.

Priority/Time: High

Funding: Local/State/Federal

Lead: Schoharie County Fire Coordinator

Non-Hazardous Material Fire, Explosion, Wildfire

The County Fire Coordinator shall work with local fire departments to inventory accessible water supplies for fire fighting and determine where new dry hydrants should be installed in the County. Such information can be included in this plan at the first revision.

Priority/Time: High

Funding: Local/State

Lead: Schoharie County Fire Coordinator

Support Agency: Local Fire Departments

Water Supply Contamination

The County Health Department and Planning and Development Agency will identify and assemble information to inform residents/property owners in municipal water supply watersheds about applicable land use regulations.

Priority/Time: High

Funding: Local

Lead: Schoharie County Planning Agency, Schoharie County Health Department

Support Agency: Schoharie County Planning Commission

Drought

The Emergency Management Office will work with Planning and Development to inventory and map monitoring wells countywide. The Schoharie County Farm Bureau will be consulted to assist with methods to improve cooperation amongst farmers to help with lack of water problems on neighboring farms.

Priority/Time: Moderate

Funding: Local

Lead: Schoharie County Emergency Management Office

Support Agency: NYSEMO, County Department of Public Works, Schoharie County Farm Bureau

Epidemic

Work shall continue to implement the plans developed by the County Health Department and the Animal Disease Response Team.

Priority/Time: High/Once annually

Funding: Local

Lead: Schoharie County Health Department

Caving Accident

The Fire Coordinator, Sheriff, and EMO shall work with the National Speleological Society to set up and advertise training for performing cave rescues. The County shall contact all fire departments to encourage training even if no caves are located in the department's response zone in order to increase the pool of trained, available cave rescuers. Maps of known caves should not be widely distributed.

Priority/Time: High/Once annually

Funding: Local

Lead: Schoharie County Sheriff, Fire Coordinator, Emergency Management Office

Support Agency: National Speleological Society

The Hazard Mitigation Committee and the National Speleological Society shall meet to determine ways to distribute information to the public about accessing and exploring caves.

Priority/Time: High/Once annually

Funding: Local

Lead: Schoharie County (Planning Agency and Emergency Management Office)

Support Agency: National Speleological Society

Utility Failure

The Hazard Mitigation Committee will continue work to establish a program to provide generators to needed facilities. The County shall continue to provide information and recommend upgrading of sewer, water and communications infrastructure in the County. Grant funds should be applied for whenever possible.

Priority/Time: High/Once annually

Funding: Local

Lead: Schoharie County Planning Agency

Support Agency: School Districts, Schoharie County Planning Commission

MEASURES TO BE IMPLEMENTED BY EACH MUNICIPALITY WITH COUNTY ASSISTANCE

Multi-Hazard Mitigation

Periodically review and revise comprehensive plans and land use regulations: The status of land use regulations in the County is listed on page 7, Table 4. To comply with this plan, the following must be evaluated as part of the development/review of a comprehensive plan or the development/major revision of land use regulations by municipalities:

- Is the town/village effectively promoting development patterns in which major transportation routes and industrial facilities are located away from population centers schools, gathering places, groundwater recharge areas, etc.? Are major transportation routes and industrial facilities planned to be located away from schools, day cares, churches, waterways, and municipal water sources? If not, have mitigation measures been considered?
- Does the town/village encourage interconnection of subdivision roads and commercial properties in order to diffuse traffic patterns and minimize single access roads?
- Do local regulations include adequate stream setbacks and standards to protect buildings and private bridges from damage due to stream bank erosion?
- Do the Town/Village floodplain development regulations (all municipalities adopted new flood damage prevention laws in April 2004) provide adequate flood protection for new development in areas with known flood risks? With the new updated digital Flood Insurance Rate Maps, each municipality should consider the desirability of additional construction standards or regulation of additional areas not identified on the Flood Insurance Rate Maps.
- Do the storm water management and erosion control standards provide adequate protection against increased flood damages?
- Are there areas where underground utilities should be required if feasible?
- Are municipal water supply watershed areas adequately protected by land use regulations?

New York Law requires any adopted plans of the County to be considered and incorporated into local plans as appropriate. The County Planning Commission can help keep local municipalities aware of this provision.

Priority/Time: High

Funding: Local

Lead: Municipalities, Schoharie County Planning Agency

Support Agency: Schoharie County Planning Commission

Hazard mitigation training for municipal officials: When offered, municipal officials (planning board members, code enforcement officer) should attend training/meetings to learn/discuss hazards that relate to site planning, transportation patterns, and development standards. Knowledge of the New York State Building Code needs to be a priority. County sponsored training/meeting may be held at or soon after annual hazard mitigation meeting. Training may include: NYDEC National Flood Insurance Program training, NYDEC storm water training, USACOE wetlands training. Building Code training should be pursued annually.

Priority/Time: High

Funding: Local

Lead: Municipalities

Support Agency: County Agencies

Address municipal staffing needs: Hazard mitigation, emergency preparedness, storm water management, public outreach, and the National Flood Insurance Program, will continue to require more and more time of municipal staff. Municipalities would benefit from additional staff resources to enable effective implementation of their hazard mitigation, flood mitigation, drainage system maintenance, and storm water management programs. Cooperative ventures could be sought. Municipal budgets are always tight and additional funding is needed to fully implement and expand these programs.

Priority/Time: High

Funding: Local/State

Lead: Municipalities, Schoharie County (Planning Agency and Emergency Management Office)

Flood

Assist property owners with flood proofing measures: The Planning and Development Agency will continue to provide technical assistance for elevation of utilities and other measures for flood proofing existing structures. If property owners are interested in implementing flood protection measures that are beyond their financial means, the County and the municipality will evaluate the desirability of applying for financial assistance for flood proofing, elevation or property acquisition. Several municipalities have already identified possible projects that are listed under the project list for the specific community.

Priority/Time: High

Funding: Local/State/Federal

Lead: Schoharie County (Planning Agency and Emergency Management Office)

Support Agency: NYSEMO, NYDEC

Upgrade existing drainage structures: When roads, ditches, and culverts are damaged due to drainage and flooding problems, the County make every effort to mitigate the problem when repairs are made. The municipalities will continue the ongoing efforts to upgrade existing drainage structures as the need and funding permit. Highway departments shall participate when requested with the countywide storm water infrastructure inventory. Several municipalities have already identified possible projects that are listed under the project list for the specific community.

Priority/Time: High

Funding: Local/State

Lead: Highway Superintendents

Support Agency: NYDOT, County Department of Public Works

Encourage Community Rating System application: With the mitigation measures already initiated in the County and on the municipal level, application to the CRS should be pursued. The Planning and Development Agency can provide assistance to municipalities in the application process. Each municipality will be educated on the process and status of the CRS at the annual hazard information meeting.

Priority/Time: High

Funding: Local

Lead: Schoharie County (Planning Agency and Emergency Management Office)

Severe Weather

Improve monitoring of weather conditions: Highway Departments should open communication with the NWS and, when feasible, highway departments should contact NWS with snowfall data and to advise NWS when forecast is not in synch with observations. Efforts should be made to provide Highway Departments with access to the NWS – Albany forecast page on the Internet, which provides the most up to date forecast available. Funding for Internet access may be necessary.

Priority/Time: High

Funding: Local

Lead: Highway Superintendents, Schoharie County (Planning Agency and Emergency Management Office)

Support Agency: NWS, Schoharie County Central Data Processing

Improve conditions of roads during extreme weather events: At the annual hazard information meeting, a discussion to improve communication with highway departments and emergency service providers will occur. Highway Superintendents should periodically review and revise plowing schedules to achieve optimal safe roadway conditions.

Priority/Time: High

Funding: Local

Lead: Highway Superintendents

Support Agency: County Department of Public Works

Terrorism

Assess the vulnerability of County water systems to a terrorist attack: Each municipality with a public water system (Sharon Springs, Richmondville, Cobleskill, Schoharie, Esperance, Jefferson, and Conesville) needs to prepare a vulnerability assessment, including an evaluation of terrorist threats. The assistance of the Hazard Mitigation Committee can be requested for such assessment.

Priority/Time: High

Funding: Local/State

Lead: Municipalities

Support Agency: County Health Department

Assess the vulnerability of municipal facilities to a terrorist attack: Each municipal facility needs to be investigated for potential vulnerabilities to terrorist attack. A representative from each municipality should work with the Hazard Mitigation Committee to assess municipal property and to find ways to improve security. The review should include vulnerability to domestic terrorism, which is a more likely scenario in Schoharie County.

Priority/Time: High

Funding: Local

Lead: Municipalities

Support Agency: NYS Police, County Sheriff

Transportation Accident

Maintain communication with the NYS Department of Transportation/DPW: The municipalities will continue to communicate with these agencies to ensure that new projects are designed to mitigate hazards. Municipalities will consider access management plans if deemed necessary. Municipal representatives and emergency response personnel will review draft plans to evaluate drainage, site access, and other conditions that might impact the dissemination of hazardous materials and the ability of emergency personnel to respond.

Priority/Time: High

Funding: Local

Lead: Highway Superintendents

Support Agency: NYDOT, County Department of Public Works

Provide municipal personnel with defensive driving training: Municipal staff that drives private or municipally owned vehicles as part of their jobs will be provided the opportunity to attend defensive driving classes through the County. The cost to the municipality is reduced by participation in the training. The municipalities should offer staff the opportunity to participate periodically.

Priority/Time: High/at least once annually

Funding: Local

Lead: Municipalities

Traffic Control Devices: Traffic control devices should continue to be checked and replaced when necessary. Lighted intersections should be equipped with alternate power sources in case of power failure. Such devices would limit constraints on emergency responders and improve traffic safety during power outages. This can be especially helpful because power outages tend to be the result of other events where emergency personnel are needed. A grant application may be pursued on the County level for such equipment and municipalities shall provide assistance to the County for such application.

Priority/Time: High

Funding: Local/State

Lead: Highway Superintendents

Support Agency: NYDOT, County Department of Public Works

Hazardous Materials/Fire

Local fire departments shall continue to work with the County to achieve the objectives in this plan. Training and equipment acquisition/upgrades will continue to be offered by the County.

Priority/Time: High

Funding: Local/State

Lead: Municipalities

Support Agency: County Fire Coordinator

Caving Accident

Local fire departments shall encourage participation of personnel in cave rescue training when offered, even if no caves are located in the normal response area.

Priority/Time: High

Funding: Local

Lead: Municipal Fire Departments, National Speleological Society, Fire Coordinator

**MUNICIPAL INFORMATION
AND
PROPOSED PROJECTS FOR SPECIFIC MUNICIPALITIES FOR WHICH ADDITIONAL
RESOURCES ARE NEEDED**

Each municipality in Schoharie County is impacted by the same hazards, but the Hazard Mitigation Committee recognizes that different hazards may have more of an impact than others. For example, Schoharie Creek flooding has a large impact in the village of Middleburgh with little or no impact in the Town of Summit. The following additional actions are recommended for specific municipalities, but cannot be accomplished with existing resources. The municipalities, with County assistance through the Hazard Mitigation Committee and Flood Committee, will pursue funding for the following actions and projects. Benefit-Cost-Analysis can be used to prioritize construction projects.

Town of Blenheim

Total structure assessed value:	\$15,667,042.00
Number of structures in 100-year floodplain:	46
Assessed value:	\$ 3,000,000.00+

Hazard Analysis (T. of Blenheim)

Moderately High Hazards:

Flood
Dam Failure
Winter Storm (Severe)
Ice Storm

Ice Jam
Fuel Shortage
Explosion
Hazardous Material (Fixed Site)
Earthquake
Food Shortage
Extreme Temperatures
Radiological (In Transit)

Moderately Low Hazards:

Severe Storm
Terrorism
Oil Spill
Wildfire
Fire
Landslide
Hazardous Material (In Transit)
Transportation Accident
Tornado
Utility Failure

Low Hazards:

Structural Collapse
Drought
Epidemic
Air Contamination
Water Supply Contamination
Caving Accident
Mine Collapse

High priority potential mitigation projects (first 5 years):

The 46 structures located in a special flood hazard area need to be evaluated to determine if elevation of structure/utilities is warranted. One structure is currently being reviewed for acquisition under the HMGP.

Lead: Town, Schoharie County Planning

Work with County to educate/assist property owners with implementation of measures that will protect existing development from flood risks (elevation of utilities, sewer backup protection, flood-proofing

measures, extension of municipal sewer and water, structure elevation, property acquisition) especially in North Blenheim area.

Lead: Town, Schoharie County Planning

Work with County to inventory all floodplain structures and educate/assist floodplain property owners with implementing measures that will protect existing development from flood risks (elevation of utilities, sewer backup protection, flood-proofing measures, extension of municipal sewer and water, structure elevation, property acquisition). Priority areas identified for elevation/acquisition projects include: North Blenheim.

Lead: Town, Schoharie County Planning

Moderate priority potential mitigation projects (first 10 – 20 years):

Demolish existing highway garage and construct new garage in non-floodplain location. Grant funding would be sought for \$200,000.00+ cost.

Lead: Town, Highway Superintendent

Work with NYDOT to elevate NYS Route 30 at cliffs at the Town of Blenheim/Fulton line. If NYDOT provides project design and cost estimate, grant funds could be sought.

Lead: Town, Schoharie County Planning

Support Agency: NYDOT

Work with County and NYSDOT to reduce rockslides on NYS Route 30 at the Town of Blenheim/Town of Fulton line. Project design and estimate could be provided by NYSDOT.

Lead: Town, Schoharie County Planning

Support Agency: NYDOT

Work with County to identify, create and maintain firebreaks near structures close to forested areas with steep slopes. Priority areas: Hamlet of Eminence and large steep slope, forested areas located near structures (map in Appendix F - CD).

Lead: Town, County Fire Coordinator

Town of Broome

Total structure assessed value: \$36,082,050.00

Number of structures in 100-year floodplain: 4

Assessed value: \$ 200,000.00+

Hazard Analysis (T. of Broome)

Moderately High Hazards:

Flood

Wildfire

Winter Storm (Severe)

Ice Storm

Fuel Shortage

Explosion

Hazardous Material (Fixed Site)

Earthquake

Food Shortage

Extreme Temperatures

Radiological (In Transit)

Moderately Low Hazards:

Dam Failure

Severe Storm

Oil Spill

Fire

Landslide

Hazardous Material (In Transit)

Transportation Accident

Tornado

Utility Failure

Ice Jam

Low Hazards:

Structural Collapse

Terrorism

Drought

Epidemic

Air Contamination

Water Supply Contamination

Mine Collapse

High priority potential mitigation projects (first 5 years):

The four residences located in a special flood hazard area need to be evaluated to determine if elevation of structure/utilities is warranted. No major flooding problems have been reported to date with the structures.

Lead: Town, Schoharie County Planning

Work with County to educate/assist property owners with implementation of measures that will protect existing development from flood risks (elevation of utilities, sewer backup protection, flood-proofing measures, extension of municipal sewer and water, structure elevation, property acquisition) especially along Catskill Creek.

Lead: Town, Schoharie County Planning

Work with County to inventory all floodplain structures and educate/assist floodplain property owners with implementing measures that will protect existing development from flood risks (elevation of utilities, sewer backup protection, flood-proofing measures, extension of municipal sewer and water, structure elevation, property acquisition). Priority areas identified for elevation/acquisition projects include: Catskill Creek floodplain.

Lead: Town, Schoharie County Planning

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Moderate priority potential mitigation projects (first 10 – 20 years):

Work with County to identify, create and maintain firebreaks near structures close to forested areas with steep slopes. Priority areas: Large steep slope, forested areas located near structures such as Livingstonville. (map in Appendix F -CD).

Lead: Town, County Fire Coordinator

Study, develop, and implement projects for stabilizing stream channels in locations where erosion threatens development or agricultural resources. Priority streams identified with ongoing problems include: Town of Broome – Catskill Creek.

Lead: Town, Schoharie County (Planning Agency and Emergency Management Office)

Support Agency: Soil and Water Conservation District, NRCS

Town of Carlisle

Total structure assessed value:	\$79,640,771.00
Number of structures in 100-year floodplain:	9
Assessed value:	\$ 700,000.00

Hazard Analysis (T. of Carlisle)

Moderately High Hazards:

Winter Storm (Severe)
Ice Storm

Fuel Shortage
Explosion
Hazardous Material (Fixed Site)
Earthquake

Moderately Low Hazards:

Flood
Dam Failure
Severe Storm
Oil Spill
Wildfire
Fire
Landslide
Hazardous Material (In Transit)
Transportation Accident
Tornado
Utility Failure
Ice Jam

Food Shortage
Extreme Temperatures
Radiological (In Transit)
Caving Accident

Low Hazards:

Structural Collapse
Terrorism
Drought
Epidemic
Air Contamination
Water Supply Contamination
Mine Collapse

High priority potential mitigation projects (first 5 years):

The nine residences located in a special flood hazard area need to be evaluated to determine if elevation of structure/utilities is warranted. No major flooding problems have been reported to date with the structures.

Lead: Town, Schoharie County Planning

Moderate priority potential mitigation projects (first 10 – 20 years):

In cooperation with the Town of Esperance and the County, a stream stabilization study needs to be performed on Fly Creek.

Lead: Town, Schoharie County (Planning Agency and Emergency Management Office)

Support Agency: Soil and Water Conservation District, NRCS, Town of Esperance

Town of Cobleskill/Village of Cobleskill

Total structure assessed value:	Village:	\$257,141,001.00
	Town:	\$ 79,765,078.00

Number of improved structures in 100-year floodplain:	109
Town:	21
Village:	88

Assessed value:	\$ 6,500,000+
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Hazard Analysis (T. of Cobleskill/Village of Cobleskill)

Moderately High Hazards:

Flood
Winter Storm (Severe)
Hazardous Material (In Transit)

Fuel Shortage
Explosion
Hazardous Material (Fixed Site)
Earthquake
Structural Collapse
Food Shortage
Extreme Temperatures
Radiological (In Transit)
Caving Accident
Water Supply Contamination

Moderately Low Hazards:

Dam Failure
Severe Storm
Oil Spill
Wildfire
Fire
Landslide
Terrorism
Transportation Accident
Tornado
Utility Failure
Ice Storm
Ice Jam

Low Hazards:

Caving Accident
Drought
Epidemic
Air Contamination
Mine Collapse

Town:

High priority potential mitigation projects (first 5 years):

The 21 structures located in a special flood hazard area need to be evaluated to determine if elevation of structure/utilities is warranted. No major flooding problems have been reported to date with the structures.

Lead: Town, Schoharie County Planning

Projects proposed in the Howes Cave Quarry shall be reviewed for potential impacts to underlying mines/caves. Continued support for a mining museum on site will help educate and protect the existing mines/caves.

Lead: Town, Schoharie County Planning

Support Agency: Cave House

Moderate priority potential mitigation projects (first 10 – 20 years):

Work with County to perform stream stabilization studies/project identification for Schoharie Creek and Cobleskill Creek.

Lead: Town, Schoharie County (Planning Agency and Emergency Management Office)

Support Agency: Soil and Water Conservation District, NRCS

Village:

High priority potential mitigation projects (first 5 years):

Develop an Emergency Action Plan for the Village of Cobleskill water reservoir dams.

Lead: Village of Cobleskill, County Health Department

Purchase and install alternative power sources for lighted intersections.

Lead: Village of Cobleskill, Schoharie County Planning

Support Agency: NYDOT

Moderate priority potential mitigation projects (first 10 – 20 years):

Mill Creek through the center of the Village has bank stabilization and flooding problems. Explore creating a flood-taxing district for properties bordering Mill Creek.

Lead: Village of Cobleskill, Schoharie County Planning

Support Agency: Soil and Water Conservation District

Evaluate opportunities (and implement as appropriate) to alleviate flooding problems by retaining or retarding water upstream through wetland creation/retention structures during high flow. Possible projects include: Village/Town of Cobleskill – Mill Creek. Grant funds for wetlands creation can be pursued.

Lead: Village of Cobleskill, Schoharie County Planning

Support Agency: Soil and Water Conservation District

Install protection for dry hydrant in Village of Cobleskill Veteran's Park pond

Lead: Village of Cobleskill, Fire Department

Study, develop, and implement projects for stabilizing stream channels in locations where erosion threatens development or agricultural resources. Priority streams identified with ongoing problems include: Village of Cobleskill – Mill Creek

Lead: Village of Cobleskill, Schoharie County (Planning Agency and Emergency Management Office)

Support Agency: Soil and Water Conservation District, NRCS

Town of Conesville

Total structure assessed value:	\$29,622,058.00
Number of improved structures in 100-year floodplain:	10
Assessed value:	\$ 580,000.00+

Hazard Analysis (T. of Conesville)

Moderately High Hazards:

Winter Storm (Severe)
Ice Storm
Flood

Fuel Shortage
Explosion
Hazardous Material (Fixed Site)
Earthquake
Food Shortage
Extreme Temperatures
Radiological (In Transit)

Moderately Low Hazards:

Dam Failure
Severe Storm
Oil Spill
Wildfire
Fire
Landslide
Hazardous Material (In Transit)
Transportation Accident
Tornado
Utility Failure
Ice Jam

Low Hazards:

Caving Accident
Structural Collapse
Terrorism
Drought
Epidemic
Air Contamination
Water Supply Contamination
Mine Collapse

High priority potential mitigation projects (first 5 years):

The ten residences located in a special flood hazard area need to be evaluated to determine if elevation of structure/utilities is warranted. No major flooding problems have been reported to date with the structures.

Lead: Town, Schoharie County Planning

Moderate priority potential mitigation projects (first 10 – 20 years):

Study, develop, and implement projects for stabilizing stream channels in locations where erosion threatens development or agricultural resources. Priority streams identified with ongoing problems include: Town of Conesville – Manor Kill

Lead: Town, Schoharie County Planning

Support Agency: Soil and Water Conservation District, Catskill Watershed, NYDOS

Work with County to identify, create and maintain firebreaks near structures close to forested areas with steep slopes. Priority areas: Large steep slope, forested areas located near structures (map in Appendix F - CD).

Lead: Town, County Fire Coordinator

Town of Esperance/Village of Esperance

Total structure assessed value:	Village:	\$ 9,496,297.00
	Town:	\$49,802,879.00

Number of improved structures in 100-year floodplain:	90
Town:	79
Village:	11

Assessed value:	\$ 6,500,000.00+
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Hazard Analysis (T. of Esperance/Village of Esperance)

Moderately High Hazards:

Flood	Ice Storm
Dam Failure	Fuel Shortage
Winter Storm (Severe)	Explosion
	Hazardous Material (Fixed Site)

Moderately Low Hazards:

Severe Storm	Earthquake
Terrorism	Food Shortage
Oil Spill	Extreme Temperatures
Wildfire	Radiological (In Transit)

Fire

Landslide

Hazardous Material (In Transit)

Transportation Accident

Tornado

Utility Failure

Ice Jam

Low Hazards:

Structural Collapse

Caving Accident

Drought

Epidemic

Air Contamination

Water Supply Contamination

Mine Collapse

Town:

High priority potential mitigation projects (first 5 years):

Work with County to educate/assist property owners with implementation of measures that will protect existing development from flood risks (elevation of utilities, sewer backup protection, flood-proofing measures, extension of municipal sewer and water, structure elevation, property acquisition) especially along Schoharie and Fly Creeks.

Lead: Town, Schoharie County Planning

Work with County to inventory all floodplain structures and educate/assist floodplain property owners with implementing measures that will protect existing development from flood risks (elevation of utilities, sewer backup protection, flood-proofing measures, extension of municipal sewer and water, structure elevation, property acquisition). Priority areas identified for elevation/acquisition projects include: Priddle Camp along Schoharie Creek consists of a cluster of single-family homes that were originally constructed as seasonal camps. Over the past few decades a majority of the camps have been improved into year round residences. After the January 1996 floods, several homes were elevated above the base

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flood elevation. Elevation of residences and utilities, especially those adjacent to Schoharie Creek must be continued. The Town does not desire acquisition of Priddle Camp structures at the present time. Several residences adjacent to Schoharie Creek at the closest approach to US Route 20 should be elevated. A project is being considered for HMGP funding in 2006.

Lead: Town, Schoharie County Planning

Moderate priority potential mitigation projects (first 10 – 20 years):

Study, develop, and implement projects for stabilizing stream channels in locations where erosion threatens development or agricultural resources. Priority streams identified with ongoing problems include: Town of Esperance – Schoharie Creek (near Cripplebush Creek and Fly Creek).

Lead: Town, Schoharie County Planning

Support Agency: Soil and Water Conservation District

Village:

High priority potential mitigation projects (first 5 years):

The eleven residences located in a special flood hazard area need to be evaluated to determine if elevation of structure/utilities is warranted. Some flooding problems have been reported to date with one of the structures on Steuben Street.

Lead: Village, Schoharie County Planning

Town of Fulton

Total structure assessed value:	\$40,224,802.00
Number of improved structures in 100-year floodplain:	36
Assessed value:	\$ 2,700,000.00

Hazard Analysis (T. of Fulton)

Moderately High Hazards:

Flood

Dam Failure

Winter Storm (Severe)

Ice Storm

Ice Jam

Fuel Shortage

Explosion

Hazardous Material (Fixed Site)

Earthquake

Food Shortage

Moderately Low Hazards:

Severe Storm

Terrorism

Oil Spill

Wildfire

Fire

Landslide

Hazardous Material (In Transit)

Transportation Accident

Tornado

Utility Failure

Extreme Temperatures

Radiological (In Transit)

Low Hazards:

Structural Collapse

Drought

Epidemic

Air Contamination

Water Supply Contamination

Mine Collapse

High priority potential mitigation projects (first 5 years):

The 36 structures located in a special flood hazard area need to be evaluated to determine if elevation of structure/utilities is warranted. No major flooding problems have been reported to date with the structures.

Lead: Town, Schoharie County Planning

Inventory all floodplain structures and educate/assist floodplain property owners with implementing measures that will protect existing development from flood risks (elevation of utilities, sewer backup protection, flood-proofing measures, extension of municipal sewer and water, structure elevation, property acquisition). Priority areas identified for elevation/acquisition projects include: Town of Fulton – Pleasant Valley Road. The estimate cost of a home relocation is \$80,000.00. This project is underway in 2006.

Lead: Town, Schoharie County Planning

Moderate priority potential mitigation projects (first 10 – 20 years):

Study, develop, and implement projects for stabilizing stream channels in locations where erosion threatens development or agricultural resources. Town of Fulton – Pleasant Valley Creek.

Lead: Town, Schoharie County Planning

Support Agency: Soil and Water Conservation District

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Work with County to identify, create and maintain firebreaks near structures close to forested areas with steep slopes. Priority areas: Hamlet of Eminence and large steep slope, forested areas located near structures (map in Appendix F - CD).

Lead: Town, County Fire Coordinator

Town of Gilboa

Total structure assessed value:	\$44,908,412.00
Number of improved structures in 100-year floodplain:	6
Assessed value:	\$ 420,000.00+

Hazard Analysis (T. of Gilboa)

Moderately High Hazards:

Flood

Dam Failure

Winter Storm (Severe)

Ice Storm

Ice Jam

Fuel Shortage

Explosion

Hazardous Material (Fixed Site)

Earthquake

Food Shortage

Moderately Low Hazards:

Severe Storm

Terrorism

Oil Spill

Wildfire

Fire

Landslide

Hazardous Material (In Transit)

Transportation Accident

Tornado

Utility Failure

Extreme Temperatures

Radiological (In Transit)

Low Hazards:

Structural Collapse

Drought

Epidemic

Air Contamination

Water Supply Contamination

Mine Collapse

High priority potential mitigation projects (first 5 years):

The six residences located in a special flood hazard area need to be evaluated to determine if elevation of structure/utilities is warranted. No major flooding problems have been reported to date with the structures.

Lead: Town, Schoharie County Planning

Moderate priority potential mitigation projects (first 10 – 20 years):

Design project and secure funding to eliminate existing landslides on Flat Creek Road in Town of Gilboa.

Lead: Town, County Department of Public Works

Work with County to identify, create and maintain firebreaks near structures close to forested areas with steep slopes. Priority areas: Large steep slope, forested areas located near structures (map in Appendix F - CD).

Lead: Town, County Fire Coordinator

Town of Jefferson

Total structure assessed value:	\$48,593,244.00
Number of improved structures in 100-year floodplain:	3
Assessed value:	\$ 240,000.00

Hazard Analysis (T. of Jefferson)

Moderately High Hazards:

Wildfire

Winter Storm (Severe)

Ice Storm

Fuel Shortage

Explosion

Hazardous Material (Fixed Site)

Earthquake

Food Shortage

Moderately Low Hazards:

Flood

Dam Failure

Severe Storm

Oil Spill

Fire

Landslide

Hazardous Material (In Transit)

Transportation Accident

Tornado

Utility Failure

Ice Jam

Extreme Temperatures

Radiological (In Transit)

Low Hazards:

Structural Collapse

Terrorism

Drought

Epidemic

Air Contamination

Water Supply Contamination

Mine Collapse

High priority potential mitigation projects (first 5 years):

The three residences located in a special flood hazard area need to be evaluated to determine if elevation of structure/utilities is warranted. No major flooding problems have been reported to date with the structures.

Lead: Town, Schoharie County Planning

Develop and implement a strategy for replacing undersized bridges and culverts on public roadways and on private property. Possible projects include: Town of Jefferson – Mill Creek/Porter Road.

Lead: Town Highway Superintendent, County Department of Public Works

Moderate priority potential mitigation projects (first 10 – 20 years):

Work with County to identify, create and maintain firebreaks near structures close to forested areas with steep slopes. Priority areas: Hamlet of Eminence and large steep slope, forested areas located near structures (map in Appendix F - CD).

Lead: Town, County Fire Coordinator

Town of Middleburgh/Village of Middleburgh

Total structure assessed value:	Village:	\$54,935,053.00
	Town:	\$60,582,791.00
Number of improved structures in 100-year floodplain:	204	
Town:	64	
Village:	140	
Assessed value:		\$24,024,800.00

Hazard Analysis (T. of Middleburgh/Village of Middleburgh)

Moderately High Hazards:

Flood

Dam Failure

Winter Storm (Severe)

Ice Storm

Fuel Shortage

Explosion

Hazardous Material (Fixed Site)

Earthquake

Moderately Low Hazards:

Severe Storm

Terrorism

Oil Spill

Wildfire

Fire

Landslide

Hazardous Material (In Transit)

Transportation Accident

Tornado

Utility Failure

Ice Jam

Food Shortage

Extreme Temperatures

Radiological (In Transit)

Water Supply Contamination

Low Hazards:

Structural Collapse

Caving Accident

Drought

Epidemic

Air Contamination

Mine Collapse

Town:

High priority potential mitigation projects (first 5 years):

The structures located in a special flood hazard area need to be evaluated to determine if elevation of structure/utilities is warranted.

Lead: Town, Schoharie County Planning

Village:

High priority potential mitigation projects (first 5 years):

The structures located in a special flood hazard area need to be evaluated to determine if elevation of structure/utilities is warranted.

Lead: Village, Schoharie County Planning

Inventory all floodplain structures and educate/assist floodplain property owners with implementing measures that will protect existing development from flood risks (elevation of utilities, sewer backup protection, flood-proofing measures, extension of municipal sewer and water, structure elevation, property acquisition). Priority areas identified for elevation/acquisition projects include: Town of Middleburgh – Mill Lane, Village of Middleburgh – Baker Avenue, Dexter Avenue, Middlefort Road and River Street.

Lead: Village, Schoharie County Planning

Moderate priority potential mitigation projects (first 10 – 20 years):

Evaluate opportunities (and implement as appropriate) to alleviate flooding problems by retaining or retarding water upstream through wetland creation/retention structures during high flow. Possible projects include: Village/Town of Middleburgh – Stoney Creek

Lead: Town, Village, Schoharie County Planning

Support Agency: Soil and Water Conservation District

Study, develop, and implement projects for stabilizing stream channels in locations where erosion threatens development or agricultural resources. Priority streams identified with ongoing problems include: Town of Middleburgh – Schoharie Creek, Town of Middleburgh – Little Schoharie Creek, Village of Middleburgh – Little Schoharie Creek.

Lead: Town, Village, Schoharie County Planning

Support Agency: Soil and Water Conservation District

Town of Richmondville/Village of Richmondville

Total structure assessed value:	Town:	\$20,592,440.00
	Village:	\$73,349,768.00
Number of structures in 100-year floodplain:	5	
Town:	4	
Village:	1	
Assessed value:	\$	160,000.00+

Hazard Analysis (T. of Richmondville/Village of Richmondville)

Moderately High Hazards:

Dam Failure

Winter Storm (Severe)

Fuel Shortage

Explosion

Hazardous Material (Fixed Site)

Earthquake

Moderately Low Hazards:

Flood

Severe Storm

Oil Spill

Wildfire

Fire

Landslide

Hazardous Material (In Transit)

Transportation Accident

Tornado

Utility Failure

Ice Jam

Ice Storm

Food Shortage

Extreme Temperatures

Radiological (In Transit)

Water Supply Contamination

Low Hazards:

Terrorism

Structural Collapse

Caving Accident

Drought

Epidemic

Air Contamination

Mine Collapse

Town:

High priority potential mitigation projects (first 5 years):

The residences located in a special flood hazard area need to be evaluated to determine if elevation of structure/utilities is warranted. No major flooding problems have been reported to date with the structures.

Lead: Town, Schoharie County Planning

Encourage NYSDOT to commence relocation of and improvements (identified in Route 7 Corridor Transportation Plan) to Warnerville-Cut-off Road to eliminate road closure due to ice jams and flooding and to eliminate an at-grade railroad crossing.

Lead: Village, Schoharie County Planning, NYDOT

Village:

High priority potential mitigation projects (first 5 years):

Due to close proximity of I-88 to the Village of Richmondville Reservoir, the Village should periodically check that a hazardous material incident could be contained before impacting the reservoir.

Lead: Village, Fire Department, County Fire Coordinator

Landslide on NYS Route 10 needs to be monitored, fixed, and/or controlled.

Lead: Town, Village, NYSDOT

Improvements to and inspection of Bear Gulch Lake Dam in the Town of Summit is critical to the safety of the Village residents. Talks should commence with Bear Gulch Lake Homeowners Association to ensure the dam is safe.

Lead: Schoharie County Emergency Management, Town of Summit, Town and Village of Richmondville, NYDEC, Bear Gulch Homeowners Association

Town of Schoharie/Village of Schoharie

Total structure assessed value:	Village:	\$60,320,903.00
	Town:	\$74,059,043.00

Number of improved structures in 100-year floodplain:	126
Town:	21
Village:	106

Assessed value:	\$54,760,900
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Hazard Analysis (T. of Schoharie/Village of Schoharie)

Moderately High Hazards:

Flood
Dam Failure
Winter Storm (Severe)

Fuel Shortage
Explosion
Hazardous Material (Fixed Site)
Earthquake
Food Shortage

Moderately Low Hazards:

Severe Storm
Terrorism
Oil Spill
Wildfire
Fire
Landslide
Hazardous Material (In Transit)
Transportation Accident
Tornado
Utility Failure
Ice Jam
Ice Storm

Extreme Temperatures
Radiological (In Transit)
Mine Collapse
Water Supply Contamination
Caving Accident

Low Hazards:

Structural Collapse
Drought
Epidemic
Air Contamination

Town:

High priority potential mitigation projects (first 5 years):

Projects proposed in the Howes Cave Quarry shall be reviewed for potential impacts to underlying mines/caves. Continued support for a mining museum on site will help educate and protect the existing mines/caves.

Lead: Town, Schoharie County Planning\

Support Agency: Cave House

The structures located in a special flood hazard area need to be evaluated to determine if elevation of structure/utilities is warranted.

Lead: Town, Schoharie County Planning

Village:**High priority potential mitigation projects (first 5 years):**

The structures located in a special flood hazard area need to be evaluated to determine if elevation of structure/utilities is warranted. No major flooding problems have been reported to date with the structures. Inventory all floodplain structures and educate/assist floodplain property owners with implementing measures that will protect existing development from flood risks (elevation of utilities, sewer backup protection, flood-proofing measures, extension of municipal sewer and water, structure elevation, property acquisition). Priority areas identified for elevation/acquisition projects include: Town of Schoharie – Karkendorf Road along Schoharie Creek, Village of Schoharie – Sunset Drive and Bridge Street

Lead: Town, Village, Schoharie County Planning

Moderate priority potential mitigation projects (first 10 – 20 years):

Study, develop, and implement projects for stabilizing stream channels in locations where erosion threatens development or agricultural resources. Priority streams identified with ongoing problems include: Town of Schoharie – Schoharie Creek

Lead: Town, Village, Schoharie County Planning

Support Agency: Soil and Water Conservation District

Town of Seward

Total structure assessed value:	\$43,428,304.00
Number of improved structures in 100-year floodplain:	8
Assessed Value:	\$ 600,000.00+

Hazard Analysis (T. of Seward)

Moderately High Hazards:

Winter Storm (Severe)
Ice Storm

Fuel Shortage
Explosion
Hazardous Material (Fixed Site)
Earthquake

Moderately Low Hazards:

Flood
Dam Failure
Severe Storm
Oil Spill
Wildfire
Fire
Landslide
Hazardous Material (In Transit)
Transportation Accident
Tornado
Utility Failure
Ice Jam

Food Shortage
Extreme Temperatures
Radiological (In Transit)
Caving Accident

Low Hazards:

Structural Collapse
Terrorism
Drought
Epidemic
Air Contamination
Water Supply Contamination
Mine Collapse

High priority potential mitigation projects (first 5 years):

The five residences located in a special flood hazard area need to be evaluated to determine if elevation of structure/utilities is warranted. No major flooding problems have been reported to date with the structures.

Lead: Town, Schoharie County Planning

Moderate priority potential mitigation projects (first 10 – 20 years):

Secure funding and design project to eliminate existing landslide on Patrick Road.

Lead: Town, Schoharie County Planning

Town of Sharon/Village of Sharon Springs

Total structure assessed value:	Village:	\$77,134,790.00
	Town:	\$40,512,738.00
Number of improved structures in 100-year floodplain:		40
Town:		9
Village:		31
Assessed value:		\$ 1,900,000.00+

Hazard Analysis (T. of Sharon/Village of Sharon Springs)

Moderately High Hazards:

Flood

Winter Storm (Severe)

Moderately Low Hazards:

Dam Failure

Severe Storm

Oil Spill

Wildfire

Fire

Landslide

Hazardous Material (In Transit)

Transportation Accident

Tornado

Utility Failure

Ice Jam

Ice Storm

Fuel Shortage

Explosion

Hazardous Material (Fixed Site)

Earthquake

Food Shortage

Extreme Temperatures

Radiological (In Transit)

Structural Collapse

Water Supply Contamination

Low Hazards:

Terrorism

Caving Accident

Drought

Epidemic

Air Contamination

Mine Collapse

Town:

High priority potential mitigation projects (first 5 years):

The fourteen residences located in a special flood hazard area need to be evaluated to determine if elevation of structure/utilities is warranted. No major flooding problems have been reported to date with the structures.

Lead: Town, Schoharie County Planning

Inventory all floodplain structures and educate/assist floodplain property owners with implementing measures that will protect existing development from flood risks (elevation of utilities, sewer backup protection, flood-proofing measures, extension of municipal sewer and water, structure elevation, property acquisition). Priority areas identified for elevation/acquisition projects include: Town of Sharon – Engleville Road

Lead: Town, Schoharie County Planning

Village:**High priority potential mitigation projects (first 5 years):**

Past flooding problems along US Route 20 may have been rectified by a NYSDOT project to divert water from Bomaker Pond to West Creek. The 25 structures located in the floodplain have not had flooding problems in the recent past. However, elevation of structures/utilities needs to be evaluated.

Lead: Village, Schoharie County Planning

Moderate priority potential mitigation projects (first 10 – 20 years):

Village water infrastructure needs to be updated.

Lead: Village, Schoharie County Planning

Town of Summit

Total structure assessed value:	\$36,254,278.00
Number of improved structures in 100-year floodplain:	2
Assessed value:	\$ 130,000.00+

Hazard Analysis (T. of Summit)

Moderately High Hazards:

Wildfire
Winter Storm (Severe)
Ice Storm

Fuel Shortage
Explosion
Hazardous Material (Fixed Site)
Earthquake
Food Shortage
Extreme Temperatures
Radiological (In Transit)

Moderately Low Hazards:

Flood
Dam Failure
Severe Storm
Oil Spill
Fire
Landslide
Hazardous Material (In Transit)
Transportation Accident
Tornado
Utility Failure
Ice Jam

Low Hazards:

Structural Collapse
Terrorism
Drought
Epidemic
Air Contamination
Water Supply Contamination
Mine Collapse

High priority potential mitigation projects (first 5 years):

The two residences located in a special flood hazard area need to be evaluated to determine if elevation of structure/utilities is warranted. No major flooding problems have been reported to date with the structures.

Lead: Town, Schoharie County Planning

Work with Bear Gulch Lake Homeowners Association to develop a plan for inspecting and maintaining Bear Gulch Dam.

Lead: Schoharie County Emergency Management, Town of Summit, Town and Village of Richmondville, NYDEC, Bear Gulch Homeowners Association

Moderate priority potential mitigation projects (first 10 – 20 years):

Identify, create and maintain firebreaks near structures close to forested areas with steep slopes. Priority areas: Hamlet of Eminence in Summit.

Lead: Town, County Fire Coordinator

Town of Wright

Total structure assessed value:	\$82,387,762.00
Number of structures in 100-year floodplain:	33
Assessed value:	\$ 2,800,000.00+

Hazard Analysis (T. of Broome)

Moderately High Hazards:

Flood

Winter Storm (Severe)

Ice Storm

Fuel Shortage

Explosion

Hazardous Material (Fixed Site)

Earthquake

Food Shortage

Moderately Low Hazards:

Dam Failure

Severe Storm

Oil Spill

Fire

Landslide

Wildfire

Hazardous Material (In Transit)

Transportation Accident

Tornado

Utility Failure

Ice Jam

Extreme Temperatures

Radiological (In Transit)

Caving Accident

Low Hazards:

Structural Collapse

Terrorism

Drought

Epidemic

Air Contamination

Water Supply Contamination

Mine Collapse

High priority potential mitigation projects (first 5 years):

The thirty-three structures located in a special flood hazard area need to be evaluated to determine if elevation of structure/utilities is warranted.

Lead: Town, Schoharie County Planning

Moderate priority potential mitigation projects (first 10 – 20 years):

Study, develop, and implement projects for stabilizing stream channels in locations where erosion threatens development or agricultural resources. Priority streams identified with ongoing problems include: Town of Wright – Fox Creek, Town of Wright – King Creek

Lead: Town, Schoharie County Planning

Support Agency: Soil and Water Conservation District

PLAN MAINTENANCE

Copies of the Plan

Each town and village will be responsible for keeping a copy of the Schoharie County All Hazards Mitigation Plan and a copy will be provided to newly elected or appointed officials by the Schoharie County Planning and Development Agency. This will provide them with an awareness of the community's risks and the plan that has been prepared to address those risks. It is anticipated that this will increase the incorporation of hazard mitigation objectives into the decision making process for the municipality. Other official repositories for the plan will be the Schoharie County Planning and Development Agency, Schoharie County Emergency Management Office, Schoharie County Clerk's Office, and libraries.

Plan Review

A complete review will be conducted every four years after adoption (first scheduled review: January 2010) or when conditions change or new information is available to warrant the need for review (after annual Hazard Information Meeting). The Schoharie County Hazard Mitigation Committee will be responsible for undertaking the review and each municipality will be contacted to have their designated representative participate in the review and/or appoint additional people to participate. In most cases the municipal representative is the code enforcement officer, supervisor or mayor. Other municipal individuals encouraged to participate will be the Highway Superintendents, Public Works Officials, Fire Chiefs, Police Chiefs, and Planning Board members.

The Hazard Mitigation Committee will solicit public input and comments each time this plan is revised. The media that will be used to encourage public involvement includes the County website, local newspaper articles, posting notices in municipal offices, and directly contacting potentially interested individuals. Citizens will be encouraged to participate in the plan revision process by attending meetings and/or notifying municipal officials of their concerns and recommendations.

The Schoharie County Planning Commission and municipal planning boards will be asked to review each revision of the plan prior to submission to the municipalities for adoption. This will ensure consistency with other planning objectives and will provide planning board members with an opportunity to periodically consider the hazards faced by the community and the opportunities for mitigating those hazards.

At each review, the Hazard Mitigation Committee will be responsible for evaluating whether goals and objectives address current and expected conditions, whether the nature or magnitude of risks has changed, current resources are appropriate for implementing the plan, outcomes have occurred as expected, and partners have participated as expected. This task will become easier with the implementation of a more complete countywide GIS and major changes to the plan are anticipated by 2010.

Once all recommended changes are considered and incorporated, the municipalities will formally adopt the revised plan (Appendix B indicates adopting municipalities).

The plan revisions will then be incorporated into all copies of this document and the date of revisions will be added to a "Revision Sheet" page at the front of each plan.